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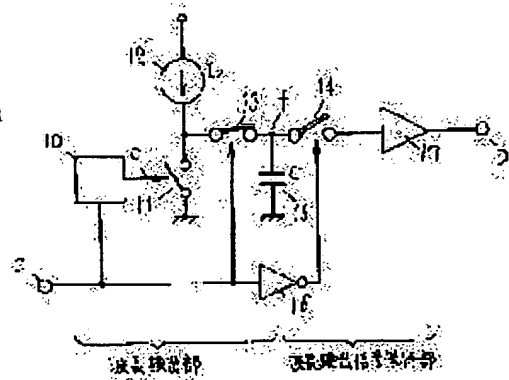
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## (54) FM DEMODULATOR

### (57)Abstract:

**PURPOSE:** To provide the FM demodulator easily integrated with simple circuit configuration by using a prescribed short range among detection ranges of a wavelength detector from which a signal of a period for each half wavelength of an input FM signal is outputted.

**CONSTITUTION:** A wavelength detection section generates a signal used to drive a reset switch SW11, a wavelength detection SW13 and a hold SW14 from an input signal. A wavelength detection signal voltage in response to a length from the leading till the trailing of the input signal is generated from a hold capacitor 15 driven by the drive signal from the SWs 11, 13 when the input signal falls down. Moreover, the SW 14 holds and outputs the wavelength detection signal. A voltage VC across the capacitor 15 is  $I_0/2CF$ , where  $I_0$  is a current from a constant current source, C is a capacitance of the capacitor 15, and F is a frequency of the input signal. The relation of  $\Delta VC = -(I_0/2C)\Delta F$  is in existence for a narrow frequency  $\Delta F$  in the input frequency F, and then FM demodulation is attained by limiting the input frequency F into the narrow frequency range.



## LEGAL STATUS

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